

# Dynamics of Asymmetric Conflict

## Pathways toward terrorism and genocide

ISSN: 1746-7586 (Print) 1746-7594 (Online) Journal homepage: <https://www.tandfonline.com/loi/rdac20>

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To cite this article: Joshua D. Freilich, Vladimir Bejan, William S. Parkin, Steven M. Chermak & Jeff Gruenewald (2019): An intervention analysis of fatal far-right extremist violence within a vector-autoregressive framework, Dynamics of Asymmetric Conflict, DOI: [10.1080/17467586.2019.1700541](https://doi.org/10.1080/17467586.2019.1700541)

To link to this article: <https://doi.org/10.1080/17467586.2019.1700541>



Published online: 23 Dec 2019.



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# An intervention analysis of fatal far-right extremist violence within a vector-autoregressive framework

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## ABSTRACT

This research examines the efficacy of 15 policy interventions and high-profile events on fatal violence committed by far-right extremists in the United States through the theoretical frameworks of deterrence, situational crime prevention, backlash, and political encouragement. We use a multivariate structural vector autoregressive process to analyse monthly time-series data to investigate the impact of these interventions on fatal far-right violence over a 25-year period. Controlling for variation in the national homicide rate, there was a decrease in far-right ideologically motivated homicide events after 9/11 and the passing of the Patriot Act. We also found an increase in non-ideological homicides after 9/11 and the Patriot Act, and a decrease after the Hate Crimes Act, Fort Hood Shooting and the Boston Bombing. Overall, it appears that most federal legislation, civil lawsuits, and changes to federal investigative guidelines, have no significant impact on far-right ideological violence and a limited impact on non-ideological violence.

## ARTICLE HISTORY

Received 12 June 2019

Accepted 1 December 2019

## KEYWORDS

Domestic terrorism; preventing terrorism; situational crime prevention; backlash arguments; far-right violence

## Introduction

This research examines the efficacy of 15 distinct policy interventions and high-profile events on fatal violence committed by far-right extremists<sup>1</sup> in the United States through the theoretical frameworks of deterrence, situational crime prevention (SCP), backlash, and political encouragement, (Freilich, Chermak, Belli, Gruenewald, & Parkin, 2014). We use a multivariate structural vector autoregressive (SVAR) process to analyse monthly time-series data to investigate the impact of multiple interventions theorized to affect levels of fatal far-right violence over a 25-year period. These causal models capture the cyclical relationship between ideologically motivated and non-ideologically motivated homicides committed by far-rightists, while controlling for the national homicide rate.

We focus on both ideologically and non-ideologically motivated fatal violence to determine whether interventions that focused specifically on terrorism resulted in either a diffusion of benefits or a displacement/substitution effect from ideological offending to

non-ideological offending. In choosing our analytical framework, we decided to focus on the 15 possible interventions, instead of only a few, because all were important events that could have impacted the number far-right homicides on the national level during the 25 year period of this study. We recognize this decision could be critiqued for including too many interventions and for analysing everything but the “kitchen sink.” We disagree though, and thought it would be disingenuous to omit key events in favour of a parsimonious, but limited, model. However, to acknowledge this critique, we first structure our analyses by conducting 15 individual structural vector autoregression (SVAR) models, one for each intervention. Next, we only select significant interventions or those approaching significance, to include in the final model with multiple interventions. Our approach thus, results in a final, simplified model that includes only the most impactful interventions, but does not ignore the many possible interventions and events that could have increased, or decreased, the frequency of homicides committed by far-right extremists.

While most terrorism studies focus on the aetiology of ideological violence and the structure of terrorist organizations, a growing number of works have focused on the effectiveness of the responses to extremist related violence and terrorism (Argomaniz & Vidal-Diez, 2015; Bejan & Parkin, 2015; Carson, 2014; Dugan & Chenoweth, 2012; Enders & Sandler, 1993; Hsu & Apel, 2015; Hsu & McDowall, 2017; Hsu, Vasquez, & McDowall, 2017; LaFree, Dugan, & Korte, 2009; Lum, Kennedy, & Sherley, 2006; Pridemore & Freilich, 2007; Yang & Jen, 2018). During the quarter of a century under study, elected officials, police officers, policy makers, non-governmental organizations (NGOs) and other non-state actors relied upon a variety of strategies to deter and or prevent ideologically motivated attacks, although no systematic efforts exist to evaluate their effectiveness (Freilich, Chermak, & Hsu, 2016). These strategies include enacting statutes that enhance the penalties for committing terrorism (i.e., increasing the severity of punishment) and publicizing these sanctions to achieve general deterrence. Other strategies rely upon proactive law enforcement and investigative techniques to prevent extremist and terrorist attacks (Clarke & Newman, 2006; Freilich, Gruenewald, & Mandala, 2019; McGarrell, Freilich, & Chermak, 2007). At times, these strategies seek to increase the likelihood of apprehension after an attack is committed (i.e., increasing the certainty of punishment) to achieve general deterrence. Although not examined empirically in prior literature, there is also an argument that targeted civil suits by NGOs against specific extremist organizations or entities may be responsible for reducing extremist related violence. For example, in March 1994 the Southern Poverty Law Centre (SPLC) won a civil suit that held the Church of the Creator responsible for the 1991 murder of Harold Mansfield Jr, a black United States Navy war veteran. The SPLC and the victim’s family won a judgement of \$1 million from the Church of the Creator (Smothers, 1996).

Key events, such as violence by jihadis and other ideological enemies of the far-right, or the election of President Obama, might also influence far-right violence. As it is important to determine which – if any – of these interventions impact far-right related violence so that policymakers and law enforcement agencies have the tools to make informed decisions, the current study addresses this theoretical and evaluative gap in the literature.

We limit our focus to the far-right because it is widely seen as one of the most deadly and threatening movements operating in the U.S. today by state and local police agencies and scholars studying domestic terrorism (Carter, Chermak, Carter, & Drew, 2014; Freilich,

Chermak, & Simone, 2009). While the FBI has been criticized for not taking the far-right threat as seriously as it should, it currently does view it as a major danger and tracks it as well as Al Qaeda/ISIS and other extremist related violence (Reitman, 2018). Freilich, Adamczyk, Chermak, Boyd, and Parkin (2015) explain that “etiological underpinnings of terrorism may differ depending upon the type of terrorists involved.... [and] it is thus appropriate to disaggregate terrorism.... to focus on the far-right since it varies from other major terrorists threats in the US” (see also Hamm, 2007; Hewitt, 2003; Krueger, 2007). It is reasonable to argue that if the causes of ideological violence differ across movements, then so might the methods for ending such violence (Carson, 2014; Gruenewald, Allison-Gruenewald, & Klein, 2015; Morris, 2016; Simi, 2009; Valasik & Phillips, 2017). The focus of the interventions is on homicides because these acts are the most serious types of violence and information on homicide is one of the most reliable forms of data available to criminologists.

In addition to this study’s contributions to criminological theory and policy evaluation research, the analytic technique is also unique. Although SVAR models have been utilized to study the impact of government policies on ideological violence (Bejan & Parkin, 2015; Enders & Sandler, 1993), this is the first study to do so using tri-variate monthly time-series data within the context of fatal violence committed by ideological extremists in the United States. For an intervention analysis, SVAR models are preferable to other types of statistical methods as they allow for the utilization of time-series data, are causal models, and account for the cyclical relationship between the variables in the model.

We extend prior studies that have employed multiple theories to investigate the effectiveness of responses to terrorism and theoretically situate our study in four criminological literatures on deterrence and SCP, as well as backlash and political encouragement theories (LaFree et al., 2009). We also pay heed to the growing number of scholars grappling with replication issues in the social sciences who have called for greater transparency in the research process (Pridemore, Makel, & Plucker, 2018). We therefore discuss all four theories and their hypotheses in the literature review section. We rejected the idea of only raising some of these theories for the first time in the discussion section and implying that we never considered these frameworks while conducting the analyses. Instead, all of the theories driving our hypotheses and analytical decisions are set forth up front. We then make sense of the findings in terms of both their theoretical and policy implications.

In the following sections, we review the relevant theoretical literatures. We list and describe 15 interventions or high-profile events in the interventions section, and hypothesize about their impact on far-right extremist homicide, both ideological and non-ideological. Broadly, interventions or high-profile events based on deterrence and situational crime prevention frameworks should decrease homicide events, while those tied to backlash and political encouragement models are hypothesized to increase the frequency of homicides. In the data and methods section, we discuss how the monthly homicide count data includes both ideologically motivated attacks (often akin to terrorism and encompassing anti-government attacks like the 1995 Oklahoma City bombing by a far-right extremist and hate crimes committed by extremists such as the massacre at an African American Church in South Carolina in 2015 by a racist far-rightist) and non-ideologically motivated homicides committed

by far-right extremists (e.g., a neo-Nazi commits murder during a robbery). After presenting our results, we discuss their theoretical and policy implications.

## Theoretical frameworks

Although the analytic techniques employed can empirically determine whether far-right homicides significantly change after an intervention, it is important to view the impact of these interventions through specific theoretical frameworks to better explain why these types of homicides increased, decreased, or stayed the same. We have selected four theoretical frameworks that offer plausible explanations. We use deterrence and situational crime prevention (SCP)/intelligence led policing (ILP) frameworks, to identify specific interventions that should lead to a reduction in fatal far-right violence. In addition, we link backlash and political encouragement models to specific interventions or events that are hypothesized to result in an increase in these fatal attacks. Before presenting the interventions and their hypothesized relationships with the homicide data, we briefly review the pertinent literature on these theories and applicable research findings specific to interventions focused on ideological violence or homicide.

There is a well-established criminological argument that the criminal law will deter criminal offenders and decrease crime. Deterrence is achieved by using the legal system to achieve conformity (Beccaria, 1764/1963; Becker, 1968; Bentham, 1789/1970; Freilich, 2015; Newman, 1997). This approach assumes that most individuals have “agency,” the ability to make rational choices. It is also assumed that persons are hedonistic, usually choosing to commit actions that are beneficial to them (i.e., the benefits outweigh the costs). Offenders will thus be less likely to commit crimes when the potential costs are too high and outweigh the benefits of offending. There are two types of deterrence, general and specific. General deterrence proponents call for the implementation of punishment to be certain, severe, and swift and then publicized to the general public (Beccaria, 1764/1963). Certainty of punishment means that offenders will be apprehended, or that likelihood of arrest is high, which in turn means they can be punished. Swiftiness of punishment means that little time should pass between the apprehension of the offender and the punishment’s implementation, while severity refers to the punishment’s magnitude and assumes if the punishment is harsh enough it will influence individual behaviour. Publicizing certainty, severity and swiftiness costs, according to deterrence theory, will lead to most individuals to choose to obey the law since they fear being apprehended and then swiftly and severely punished. Specific deterrence is based upon these same principles and uses punishment to discourage the specific offender in this particular case from offending again in the future.

It is common for terrorism and homicide researchers to hypothesize that any decreases in a phenomenon after an intervention can be explained through deterrence. Dugan, LaFree, and Piquero (2005) evaluated the effect of interventions on airplane hijackings through a rational choice framework and found evidence that when the certainty of success decreased through the implementation of specific interventions focused on capturing offenders, the rates of hijackings decreased. Other legal interventions that increased the severity of the punishment also appeared to deter hijacking. Similarly, Carson (2014) found that extreme environmental groups in the United States were somewhat deterred by specific laws, though the findings were statute and outcome specific. The ability for legal sanctions to deter this type of ideological violence is mixed

however, as other studies have shown that legal interventions in the United States aimed at anti-abortion activists, as well as international terrorism conventions, have had a limited impact (Cauley & Im, 1988; Pridemore & Freilich, 2007). Utilizing a vector autoregressive framework, scholars present evidence that terrorism events can be deterred by government's employing repressive military and law enforcement tactics against terrorist organizations (Bejan & Parkin, 2015; see also Yang & Jen, 2018).

Governments and others have also developed strategies to make it more difficult for terrorists to launch attacks. Recently, SCP, a criminological approach that seeks to manipulate the environment by reducing opportunities that allow crime to occur, and the related ILP strategy where data on crime and information on the conditions of crime are analysed to guide tactical responses to threats, have increasingly been applied to terrorism contexts (Carter, Carter, & Chermak, 2013; Clarke & Newman, 2006; Freilich & Newman, 2009; Hsu & Apel, 2015; Mandala & Freilich, 2018; McGarrell et al., 2007). Many of these strategies are not based upon deterrence principles but instead make it more difficult for the terrorists to attack regardless of offender motivation, rationality, or agency.

Importantly, SCP and these other frameworks do not expect statutes that only increase punishments to have much effect on criminal offending because they are too removed from potential crime scenes to influence offender decision making during these situations (Cornish & Clarke, 1986; Tilley, 2004). SCP proponents, in other words, contest Beccaria and deterrence theory's use of statutes and punishment to raise the costs of crime commission and thereby make it more likely that offenders will be too fearful to choose to commit crime (Ekblom, 2007; Freilich, 2015; Newman & Clarke, 2003). Instead, SCP theorists concentrate on interventions that influence crime scenes through the employment of five strategies that include twenty-five techniques to prevent crime (Cornish & Clarke, 2003). These techniques are "hard" interventions that make it more difficult or impossible to commit the offence. Some hard interventions make changes to the environmental design and landscape to again make it more difficult for the offender to offend. Other strategies are "soft" interventions that reduce or eliminate cues that increase a person's motivation to commit a crime during the incident. Hsu and Apel's (2015) study looking at the impact of metal detectors (a hard situational intervention) on hijackings is an example of the SCP approach to terrorism. The previously mentioned research of Cauley and Im (1988) and Dugan et al. (2005) also examined situational interventions, such as hardening targets by increasing security at airports to reduce airplane hijackings.

While deterrence and SCP usually claim that interventions by the government and others should result in decreased offending, others contest this. Some argue that harsh penalties and/or policies could have the opposite of their intended effect and lead to increased violence. LaFree et al. (2009; see also McCauley, 2006; Pridemore & Freilich, 2007) explain that government policies that "outrage participants or energize a base of potential supporters ... may increase the likelihood of further terrorist strikes." Reactance theory argues that offenders will defy laws, policies and actions that seek to eliminate their freedom and control their behaviour (Brehm & Brehm, 1981). Sprinzak (1995) and Kaplan (1995) argue that harsh measures could result in an "us vs them" outlook by both law enforcement and extremists that results in increased terrorist offending (Freilich et al., 2016). Criminology's labelling theory similarly assumes that in many circumstances increased punishment will have the unintended effect of increasing criminal behaviour (Becker, 1963).

Political frustration/deprivation arguments likewise claim that movements will turn to violence when they have failed politically. Blanchard and Prewitt (1993) contend, for example, that the American anti-abortion movement embraced bombings and assassinations when they failed politically to achieve their goals. Nice (1988) found that anti-abortion bombings were more likely in states where the anti-abortion movement had been less successful in restricting access to healthcare providers who performed abortions or reducing the number of abortions (Freilich & Pridemore, 2007; Hewitt, 2000, 2003). Dugan and Chenoweth (2012) present evidence that increases in repressive acts by the Israeli government had the potential to increase future acts of terrorism.

Finally, the political encouragement framework maintains that ideologically motivated violence may occur not due to political failure, but rather because of the movement's success. Such violence will occur when the movement is encouraged by its political victories, and when it feels that it has the support and sympathy of the larger community (Hewitt, 2000, 2003; Mason, 2002). Van Dyke, Soule, and Widom (2001) found that states with sodomy laws had more anti-gay hate crimes and they concluded that the political successes of the anti-gay movement "may indicate a greater tolerance for right-wing activity." It is possible that spectacular movement related violence may similarly convey a message to fellow extremists that they are not alone and that now is the time for action. Fellow extremists may then be encouraged to commit additional attacks.

We use these theoretical frameworks to hypothesize about the impact the chosen interventions will have on far-right fatal violence in the United States.

## Interventions

We identified 15 important interventions and high-profile events, including the passing of legislative statutes, changes in investigative techniques, the success of civil suits, terrorist attacks and other events. Table 1, below, lists each intervention, as well as the hypothesized direction in which the intervention might impact the variables of interest based on the aforementioned theories. Due to the temporal proximity of specific events, we were unable to investigate every possible intervention or event that could impact far-right violence. Therefore, we selected a diverse set of interventions predicted to have the most theoretical and practical importance. We grouped the interventions into five categories: (1) successful civil lawsuits against far-right organizations; (2) passing of federal statutes focused on ideological violence; (3) changes in the FBI's investigative guidelines; (4) terrorist attacks; and (5) other high-profile events that were of possible relevance to the far-right belief system. Importantly, certain interventions and high-profile events are linked to more than one framework and thus have competing hypotheses. Finally, we differentiate whether these interventions should have disproportionate impacts on ideological versus non-ideological far-right homicides.

### *Civil lawsuits*

The first two interventions were civil lawsuits by the Southern Poverty Law Centre (SPLC) against racist far-right groups. The SPLC is an NGO watch-group that monitors and tracks extremist movements like jihadists and the far-right, as well as violent acts committed by their adherents. The SPLC's first successful civil suit (*Mansfield v. Church of the Creator*)



**Table 1.** Hypothesized direction of intervention's effect by motivation (Ideological (IDEO) and Non-Ideological (NONID)) and theoretical justification.

Intervention		Deterrence		SCP		Backlash		Political Encouragement	
		IDEO	NONID	IDEO	NONID	IDEO	NONID	IDEO	NONID
Civil Lawsuits	Mansfield v. Church of the Creator	-		-		+			
Federal Statutes	Keenan v. Aryan Nations	-		-		+			
	Federal Assault Weapons Ban			-	-	+			
	Antiterrorism/Death Penalty Act	-	-			+			
	PATRIOT Act			-		+			
FBI	Hate Crimes Prevention Act	-	-			+	+		
	Mukasey Guideline Change			-	-	+	+		
Terrorist Attacks	World Trade Centre 1993					+	+		
	Oklahoma City Bombing							+	+
	9/11 Attacks					+	+		
	Fort Hood Shooting					+	+		
	Boston Marathon Bombing					+	+		
High-Profile Events	Ruby Ridge					+			
	Waco					+			
	Obama Election					+			

occurred in March 1994 when the Church of the Creator was held responsible for the 1991 murder of Harold Mansfield Jr, a black United States Navy war veteran. The SPLC represented the victim's family and won a judgement of \$1 million (Smothers, 1996). The second civil suit victory (Keenan v. Aryan Nations) occurred in September 2000 when the SPLC won a \$6.3 million judgement against the Aryan Nations. The group was held responsible for the behaviours of its members who shot at and beat a woman and her son after they stopped in front of the property (Verhovek, 2000).

Our examination of these two civil suits extends the prior literature that has usually ignored the impact of NGOs and watch groups like the SPLC. This is important because criminological research often argues that sanctions and actions by non-criminal justice actors have a greater effect on potential offenders than the formal criminal justice system (Freilich & Newman, 2016; Grasmick, Bursik, & Arneklev, 1999; Sparrow, 2012). We hypothesized through a SCP framework that the SPLC's two civil suits would lead to a decrease in fatal far-right ideologically motivated attacks. In both cases, the civil suit impacted the organization by depriving them of resources (i.e., money), which may have hampered their ability to plan and commit future attacks and encourage others to do so. SCP scholars Ekblom and Tilley (2000) highlight that offenders must possess tools and skills to successfully commit their crimes. These civil suits sought to deny far-right extremists access to resources that could be used to commit violent actions. In addition, these suits might also have deterrent effects. After other far-right organizations learned about these bankruptcies, per this argument, they could become fearful of incurring similar costs and shy away from future violence. However, like statutes, civil suits may be too removed from potential situational opportunities to have this effect outside of specific deterrence.

Finally, it is possible that the success of these civil lawsuits could cause a backlash as those connected to the organizations that lost resources through the legal judgements might push back at the legal system and the societal mechanisms that punished them. These predictions are specific to far-right ideological homicide, as the civil lawsuits were



focused on ideological organizations and were meant to make a statement against those who adhered to the organizations' far-right ideologies. According to the theories discussed, the defeat of an organization in court, and a perceived defeat of the organizational ideology itself, would be unlikely to impact non-ideological homicides committed by far-rightists, such as domestic violence, personal disputes, or felony murders.

### ***Federal statutes***

We identified four federal statutes as legal interventions that could have impacted far-right violence across the entire United States. The first statute was the Federal Assault Weapons Ban – officially, the Public Safety and Recreational Firearms Use Protection Act – a subsection of the Violent Crime Control and Law Enforcement Act of 1994, passed in September of that year. This statute included a prohibition for 10 years on the manufacturing for civilian use of certain semi-automatic firearms defined as assault weapons, as well as ammunition magazines defined as “large capacity.” Since the far-right’s ideology (see EN 1) places a special emphasis on gun rights, we investigate through backlash theory whether this act, which many interpreted as an infringement upon that right, led to an increase only in fatal far-right ideologically motivated violence. In addition, this statute could potentially limit the number of firearm related homicides by limiting access to such weapons. In this scenario, SCP would predict that both ideological and non-ideological homicides would be reduced, since this approach has long argued that firearms are crime facilitators that should be regulated (Laycock, 2005).

The second statute was the Antiterrorism and Effective Death Penalty Act (AEDPA) of 1996. This law went into effect in April 1996 and was passed in reaction to the 1995 Oklahoma City bombing by far-right extremist Timothy McVeigh, as well as the first World Trade Centre bombing in 1993 by Al Qaeda affiliates. This law modified existing policies, including Habeas Corpus, and sought to deter terrorism. We expect that the AEDPA will be associated with a decrease in fatal far-right ideologically motivated attacks because it increased penalties, specifically the severity of punishment, for certain terrorist offences. In addition, this statute changed habeas corpus and sought to limit appeals, which could be viewed as attempting to make punishment both swifter and more certain. Importantly, the passage of the bill received extraordinary publicity (Chermak, 2002). As an intervention, deterrence theory predicts that as the law increases the certainty, severity and swiftness of punishment, it should lead to a reduction in future far-right violence. Since several of these provisions were not restricted to terrorism defendants (e.g., habeas corpus changes), the statute had the potential to impact non-ideological homicide events too. Finally, as parts of the law focused on ideologically motivated offences, citing the Oklahoma City bombing as a justification for the law, there is also the possibility of backlash occurring, though only for the ideological far-right homicides.

The third statute was the Patriot Act (Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001) that was signed into law in October 2001. This statute provided law enforcement additional powers to share information, conduct surveillance, access personal records, and conduct secretive searches. The Patriot Act included provisions that have SCP implications that make it more difficult and risky to commit attacks. It was one of the most far-reaching laws ever passed in terms of providing law enforcement with additional investigative tools. The

Patriot Act, also consistent with ILP, provided resources to improve the intelligence function of law enforcement agencies. These changes should allow law enforcement to both identify potential terrorist plots and then situationally thwart them. Significantly, the Patriot Act impact went beyond federal law enforcement and had an effect on state and local police as well. More resources were allocated for state and local police agencies to enhance their capacity to focus on information sharing with federal and other police agencies. Greater stress was also placed upon proactive policing strategies and trainings. Both the Department of Homeland Security (DHS) and the FBI engaged with state and local police on these issues. This is important since most far-right homicides (both ideological and non-ideological) are investigated by local police and are prosecuted on the state, as opposed to the federal, level.

Based upon SCP/ILP arguments we expect the 2001 Patriot Act to lead a decrease only in fatal far-right ideologically motivated attacks, as many of the new powers granted law enforcement were specific to domestic terrorism cases. However, there could have been a backlash against the law by the far-right, as it signalled additional powers granted to the federal government that far-rightists would have viewed as an affront to their freedoms as American citizens.

The final statute, the Matthew Shepard and James Byrd Jr Hate Crimes Prevention Act, was passed in October 2009 as part of the National Defence Authorization Act for Fiscal Year 2010. This law was passed in response to high-profile bias crime murders against James Byrd Jr, an African-American murdered in Texas, and Matthew Shepard, a gay man murdered in Wyoming. It expanded the reach of the federal hate crimes statute and deterrence theory predicts a decrease in fatal far-right ideologically motivated attacks could be viewed as increasing the costs of committing a hate crime. Further, federal prosecutions have a higher conviction rate, which should make punishments under its jurisdiction more certain. The creation of this statute also means that offenders faced additional penalties which could be viewed as increasing the severity of punishment. In addition, as far-rightists can also engage in non-ideological homicides that could be prosecuted as a hate crime,<sup>2</sup> but not terrorism, deterrence theory would also predict a potential decrease in these acts. Finally, backlash theory predicts that once again, a federal statute that expands government powers could result in an increase of homicide events for both ideologically and non-ideologically motivated homicide events.

### ***Investigative guidelines***

We also include the Federal Bureau of Investigation's investigative guidelines, which were revised by the U.S. Attorney General Michael Mukasey (2008) and made effective on 1 December 2008, as an intervention (FBI National Press Office, 2008). The guidelines state that "The general objective . . . is the full utilization of all authorities and investigative methods, consistent with the Constitution and laws of the United States, to protect the United States and its people from terrorism and other threats to the national security, to protect the United States and its people from victimization by all crimes in violation of federal law, and to further the foreign intelligence objectives of the United States" (Mukasey, 2008). We hypothesize that an SCP/ILP framework would predict that these revised guidelines were associated with a decrease in fatal far-right ideologically motivated attacks as they made several critical changes to the FBI's approach to preventing

and responding to terrorism. The changes included loosening requirements for commencing investigations and shifting the FBI's focus to domestic intelligence work.

### ***Terrorist attacks***

In addition to these legal interventions, we included high-profile ideologically motivated attacks by jihadists in the U.S. in the analysis. Four Al Qaeda directed or inspired, terrorist strikes on U.S. soil were included in the analysis: the February 1993 World Trade Centre bombing in New York City; the 9/11 attacks in 2001; the November 2009 Fort Hood shooting attack; and the April 2013 Boston Marathon bombing. The 9/11 attacks and the Fort Hood shooting represent the deadliest terrorist attacks on U.S. soil between 1990 and 2014 motivated by jihadi extremism. The 1993 World Trade Centre bombing and the Boston bombing while not as deadly, were both high-profile events that were heavily covered by the media. Backlash theory predicts that all four of these jihadist attacks should result in increased fatal far-right ideologically motivated attacks. The American far-right is extremely nationalistic and protective of American sovereignty. Some segments of the far-right are also anti-Muslim and may have been outraged by these jihadist attacks against the homeland. The hate crimes research has similarly found that one type of bias crime may create a backlash resulting in revenge attacks. For instance, Green, Glaser, and Rich (1998) found that anti-black and anti-white hate crimes in New York City were correlated. This pattern is also predicted to be found with the non-ideological homicides as, once again, the backlash effect could be found in non-ideologically motivated homicides that were potentially hate crimes or where the victim was targeted for their perceived association with Islam, yet no additional ideological motive was uncovered.

We also examined the 1995 Oklahoma City bombing by far-right extremist McVeigh. This attack killed 168 persons and significantly affected the far-right militia movement and had the potential to impact future fatal far-right attacks either by empowering or by suppressing the movement (Chermak, 2002). Based upon the political encouragement model, we anticipate that the 1995 Oklahoma City bombing, the deadliest attack until then, by far-right extremists will result in increased fatal far-right ideologically motivated attacks. As this event was ideological in nature, we hypothesize that the political encouragement could also bleed over into the non-ideological homicides, as far-rightists might be emboldened to target minorities and government agents for non-ideological homicides too.

### ***Other high-profile events***

We also considered three other high profile events. The first two incidents are the August 1992 Ruby Ridge incident siege of a white supremacist that resulted in the death of a woman and her baby when they were shot by a federal agent and the April 1993 Waco siege, which resulted in the deaths of 76 civilians. Both of these high profile events led to accusations of government misconduct (Chermak, 2002). Backlash theory predicts that both the Ruby Ridge and Waco events would lead to an increase in fatal far-right ideologically motivated violence. Far-right ideology extols individual liberty and is fearful of government overreach. Both of these events involved government agents killing citizens and may have outraged the far-right movement and led some to "strike back" by committing fatal ideologically motivated attacks.

The last high-profile event considered is the election of President Barak Obama in November 2008 to his first term in office. Since a large segment of far-right extremists adhere to white supremacist ideologies it is hypothesized that the election of the first African American President will lead to an increase in deadly far-right violence. This component of the far-right may have interpreted this election as a major loss to their movement that required violent reprisals against both the government and racial, as well as religious, minorities.

### ***Diffusion and displacement***

Finally, although not all interventions are hypothesized to impact the frequency of non-ideological far-right homicides, it is possible that reductions in these types of violence could be evidence of a diffusion of benefits. For example, although the two civil suits and several federal statutes were designed to respond to (and reduce) terrorist attacks, it is possible that they also had a wider impact. Studies evaluating the effectiveness of SCP strategies to reduce crime have often identified this diffusion of benefits (Guerette & Bowers, 2009). This idea refers to cases where an intervention is implemented and a crime reduction also occurs in similar targets that have not received, or were not intended to be influenced by, the intervention. Publicity is the mechanism that may create this wider crime reduction. Offenders may hear about these proposed interventions and mistakenly conclude that it also is directed at and will impact them (Bowers & Johnson, 2005; Clarke & Weisburd, 1994). Therefore, unexpected results in the analysis will be viewed as a potential diffusion of benefits effect. Conversely, situational interventions that result in increased non-ideological violence might be evidence of a displacement effect. Prior research outlines several types of displacement including those where the intervention displaces the crime problem to another type of target or offence (in this case, non-ideologically motivated homicides) (Reppetto, 1976).

### **Data and methods**

The homicide data for this research include all incidents that satisfy the U.S. Extremist Crime Database's (ECDB) inclusion criteria<sup>3</sup> For a homicide to be included it must have:

- Occurred in the United States
- Been identified in open-sources
- Occurred between January 1, 1990 and December 31, 2014
- Included at least one offender who was a far-right extremist

The homicide events were also separated into ideologically motivated and non-ideologically motivated incidents. A homicide was coded as ideologically motivated if specific indicators were identified that provide evidence that the offender engaged in the fatal, criminal act to further (at least partly) their extremist ideology. These indicators could include, but are not limited to, personal statements made by the offender, physical evidence such as a note or manifesto, or comments made by law enforcement or lawyers stating that the motive was ideological.<sup>4</sup>

The number of far-right homicide events was then aggregated into two variables that measured the monthly count of ideological and non-ideological incidents. To control for the national variation in general homicides, the monthly murder and non-negligent manslaughter rate per 100,000 persons, which was calculated using the Uniform Crime Report’s Supplementary Homicide Report Data (SHR) and the United States Bureau of Census’s monthly population estimates were also collected.

For the time period January 1990 through December 2014, we have monthly count data (N = 300) for the three data sets: ideological homicide events (*ideol*), non-ideological homicide events (*nonid*) and national homicide rate (*homic*). These data were then used to examine the impact of the interventions on the three homicide variables while controlling for the temporal and cyclical relationship between them using a structural vector autoregressive framework.

As presented in Table 2, along with other descriptive statistics for the original data, the ideological and non-ideological far-right homicide counts had many observations that were 0. Specifically, 55.7% of the months observed had zero far-right ideological homicides and 51.3% of the months observed had zero far-right non-ideological homicides. To address the positive skewness of these two variables, we follow the approach of Burbidge, Magee, and Robb (1988) who perform the following inverse hyperbolic sine (IHS) transformation for each of the variables

$$g(Y_t, \theta) \equiv g_t = \ln \left( \theta Y_t + \sqrt{1 + \theta^2 Y_t^2} \right) / \theta \tag{1}$$

where  $g_t$  is the transformed variable and  $\theta$  is equal to one.<sup>5</sup> IHS transformation is used “to reduce the influence of extreme observations of the dependent variables” on the regression (Burbidge et al., 1988) This method of dealing data sets dominated by zeros or to deal with the outliers has been adopted by many researchers, especially in the fields of finance, economics, management, marketing, agricultural economics and criminal justice (Bejan, Hickman, Parkin, & Pozo, 2018; Bellemare, Barrett, & Just, 2013; Browning, Bourguignon, Chiappori, & Lechene, 1994; Carroll, Dynan, & Krane, 2003; Deleersnyder, Dekimpe, Sarvary, & Parker, 2004; Georgarakos & Pasini, 2011; Vergne, 2012).

Another advantage of the HIS transformation if the values are substantially large, the regression coefficient can be interpreted as elasticity. For the remaining cases, the same coefficient can be interpreted as coefficient times the unit change of independent variable. Consider, for example, a variable  $z_i$  that is a measure of household wealth in the USA in a given year for  $i = 1, \dots, n$ . If we were to estimate a linear regression model that tries to explain the level of wealth as a function of explanatory variables using the untransformed values of

**Table 2.** Descriptive statistics for original data (N = 300).

Homicide Variable	Ideological	Non-Ideological	Rate
Minimum	0.000	0.000	0.307
Q1	0.000	0.000	0.376
Median	0.000	0.000	0.411
Mean	0.633	0.800	0.472
Q3	1.000	1.000	0.537
Max	4.000	5.000	0.927
Standard Deviation	0.861	1.700	0.140
Proportion Observations 0	0.557	0.513	0.000

wealth, we will obtain model residuals that are non-normal and natural log transformation is needed. Given some households have a negative wealth, the log-transformation will not work. Burbidge et al. (1988) show that if one performs the HIS transformation of wealth variable, the IHS transformed large values of wealth can be treated as a natural log transformation. The rest of the values can be treated as if the variable was in the original unit of measurement.

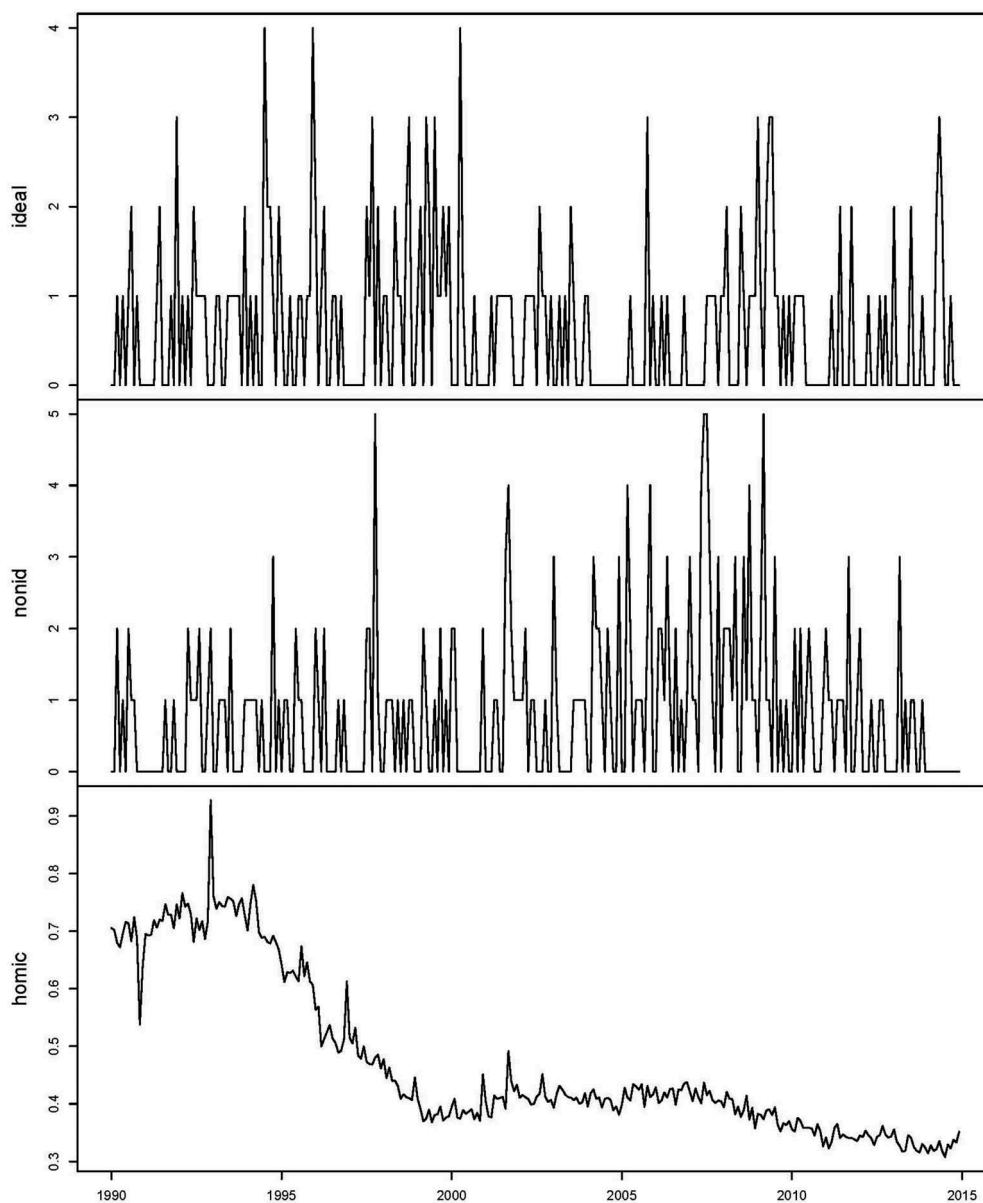
Thus, we can estimate linear models with the transformed data. Since the reason for the HIS transformation is to deal with multiple zeroes in the data set which does not contain large observations, the interpretation of the coefficients will be the same as if we used the untransformed data in the analysis. We applied the same transformation to all data series to be consistent. The following plots show that the IHS transformations preserve the properties of the original data.

Figures 1 and 2 plot the original and transformed series. Augmented Dickey-Fuller (ADF) and Kwiatkowski-Phillips-Schmidt-Shin (KPSS) non-stationarity tests show that ideological and non-ideological homicide events are stationary while the homicide rate is non-stationary. Thus, we use the homicide rate series in first differences in our analysis.

Table 3 presents the list of potential intervention dates in chronological order while Table 4 shows the correlation matrix between the intervention events that are considered in this model. Close examination reveals that multiple events are highly correlated. Correlations higher than 0.7 are highlighted in bold. As a result, several interventions will have similar coefficients and significance, and it will be important to consider this when interpreting the results.<sup>6</sup>

To examine the relationship between the homicide variables and the interventions, we ran a series of structural vector autoregression (SVAR) models. VAR models were first proposed by Sims (1980) as an alternative to large scale simultaneous equation models (Killian, 2011). One of the key advantages of a VAR model is that it allows us to model the feedback effect that goes from the independent variables to the dependent one. When one runs a regression  $Y_t = a_0 + a_1 X_t$  it explicitly assumes that  $X_t$  affects  $Y_t$ , but  $Y_t$  cannot affect  $X_t$ . In physical sciences, where the experiment is controlled, this can be the case. In the social sciences, however, this assumption is most likely not plausible. VAR models allow one to model such relationships by including the lags of endogenous variables as regressors. As a result, we can model  $Y_t$  as a function of its own lags and lags of  $X_t$ , and  $X_t$  as a function of the lags of  $Y_t$  and its own lags. Thus, allowing lags of each variable to impact the other variable and itself. This is called a reduced form VAR model, because the error terms are serially correlated and are a function of the underlying structural shocks which are orthogonal by design.<sup>7</sup> Moreover, the coefficients from the estimated models are meaningless since they are a function of true structural parameters. The recovered structural parameters can be used to interpret model's results. The generation of such interpretation is known as the identification of a model (Sims, 1986). By imposing a model structure, we are imposing contemporaneous effects on the model, meaning we make assumptions which endogenous variables affect others at time  $t$ .

For the SVAR models, a structure is imposed upon the relationship between the three homicide variables. When imposing the structure, it was assumed that the homicide rate could impact the far-right ideological homicide count with a one-month lag. In turn, the far-right ideological homicide count would not impact the far-right non-ideological count contemporaneously. This structure was imposed because (1) it makes theoretical sense that all things being equal increases in homicide in general would increase the number of both far-right ideological and far-right non-ideological homicides; (2) many

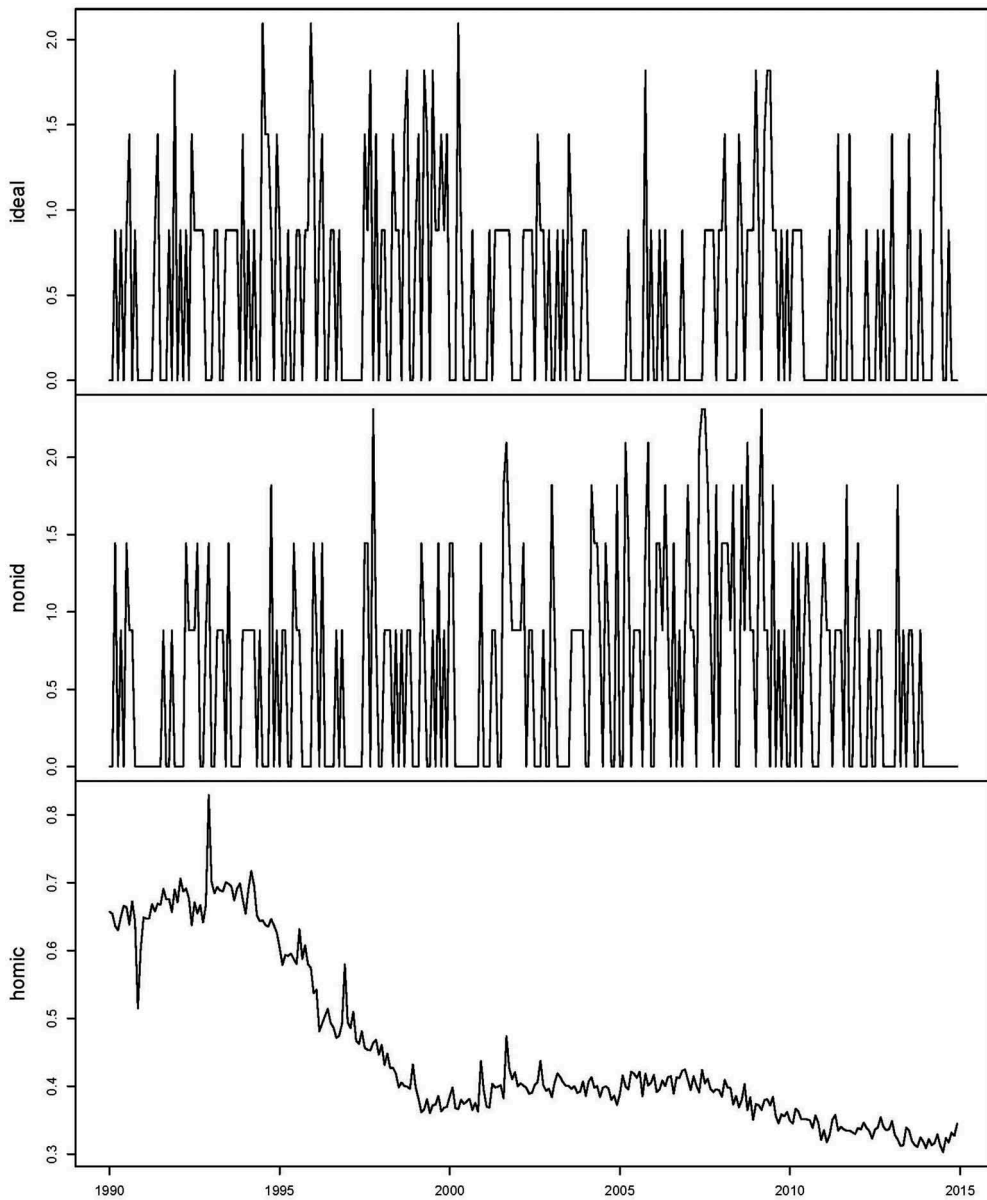


**Figure 1.** Temporal distribution of original data.

of the interventions were hypothesized to primarily impact ideological violence; and (3) we are also interested in an intervention's possible diffusion of benefits or displacement effect to non-ideological homicides after impacting the monthly number of ideological homicides.<sup>8</sup>

As stated, these SVAR models allow us to examine the reciprocal relationships between the variables, thus relaxing the assumptions of the directional causality as is the case with single equation models. Although we would not theoretically expect that the monthly far-right homicide counts would have a significant impact on the homicide





**Figure 2.** Temporal distribution of IHS transformed data.

rate, outside of the fact that they constitute an extremely small fraction of the homicide rate, it is conceivable that the changes in the homicide rate could impact the number of far-right ideological and far-right non-ideological homicides, or that the number of far-right ideological homicides could impact the number of far-right non-ideological homicides, and vice versa. The analyses we conducted are able to inform us as to whether or not there was a significant change in our homicide measurements after the interventions, while controlling for the cyclical relationship between these variables. In all sets of analyses, the interventions are included as dummy variables. This means we create

**Table 3.** Interventions in chronological order.

Date	Intervention	Type	Abbreviation
8/1992	Ruby Ridge	Other Event	(oth.1)
2/1993	World Trade Centre Bombing	Terrorist Attack	(ter.1)
4/1993	Waco Siege Ends	Other Event	(oth.2)
3/1994	Mansfield vs Church of the Creator	Civil Lawsuit	(spl.1)
9/1994	Federal Assault Weapons Ban	Federal Statute	(fed.1)
4/1995	Oklahoma City Bombing	Terrorist Attack	(ter.2)
4/1996	Antiterrorism & Effective Death Penalty Act	Federal Statute	(fed.2)
9/2000	Keenan v. Aryan Nations	Civil Lawsuit	(spl.2)
9/2001	9/11 Terrorist Attacks	Terrorist Attack	(ter.3)
10/2001	Patriot Act	Federal Statute	(fed.3)
11/2008	President Obama Election	Other Event	(oth.3)
12/2008	Mukasey Guidelines	FBI Guidelines Change	(fbi.1)
10/2009	Matthew Shepard & James Byrd Jr. Hate Crimes Prevention Act	Federal Statute	(fed.4)
11/2009	Fort Hood Shooting	Terrorist Attack	(ter.4)
4/2013	Boston Marathon Bombing	Terrorist Attack	(ter.5)

a variable for each intervention that contains a value of zero before the event date and a value of one after the event takes place. For example, the Federal assault weapons ban implemented in September 1994 will have a value of zero until 9/1994 and a value of 1 until the end date, regardless that other events took place between September 1994 and December 2014. We examined the intervention dates individually on our variables of interest before running a model with multiple interventions. As stated, our analysis models the dynamic relationship between the ideological homicide count, the non-ideological homicide count, and the homicide rate. By doing so, we allow these variables to affect each other with a lag.<sup>9</sup> To conduct these analyses, R was used for the estimation.

## Results

Table 5 presents significant (and approaching significance) estimation results from a structural VAR single intervention model with 2 lags.<sup>10</sup> Due to the temporal proximity of the SPLC suit against the Aryan Nations, the 9/11 attacks, and the Patriot Act, it is not surprising to see that the effect of these events on the ideological and non-ideological homicides yields similar coefficients. These events decrease ideological violence by around 0.185. Given that the mean value for the ideological homicides series is 0.633, this is equivalent to a 29% decrease from the mean. At the same time, these events are associated with an increase in non-ideological homicides by 0.21–0.23, which is equivalent to an increase of 26%–29% given that the mean non-ideological homicide is 0.8. The passage of the Hate Crime Prevention Act decreased non-ideological homicides by 0.18, or 22.5% decrease. The same act decreased ideological homicides by 0.158 or 25% from the mean. The Fort Hood shooting is associated with a 0.168 decrease in the ideological homicides or 27%. The Boston bombing decreased the non-ideological homicide count by 0.392, which is equivalent to a decrease of 49% from mean.

As each of the models tested only included one intervention, a final model was run that included multiple interventions using Newey-West correction to account for possible serial correlation and heteroskedasticity. The interventions that were chosen were based on whether they were significant in the prior models, which included the 9/11 attacks, the Patriot Act, the Hate Crimes Prevention Act, the Fort Hood shooting, and the

Table 4. Intervention correlations.

Date	Intervention	8/92	2/93	4/93	3/94	9/94	4/95	4/96	9/00	9/01	10/01	11/08	12/08	10/09	11/09	4/13
8/92	<i>oth.1</i>	1.000														
2/93	<i>ter.1</i>	<b>0.903</b>	1.000													
4/93	<i>oth.2</i>	<b>0.875</b>	<b>0.970</b>	1.000												
3/94	<i>spl.1</i>	<b>0.754</b>	<b>0.836</b>	<b>0.862</b>	1.000											
9/94	<i>fed.1</i>	<b>0.703</b>	<b>0.779</b>	<b>0.804</b>	<b>0.932</b>	1.000										
4/95	<i>ter.2</i>	0.653	<b>0.723</b>	<b>0.746</b>	<b>0.866</b>	<b>0.928</b>	1.000									
4/96	<i>fed.2</i>	0.582	0.645	0.665	<b>0.771</b>	<b>0.828</b>	<b>0.892</b>	1.000								
9/00	<i>spl.2</i>	0.389	0.431	0.444	0.515	0.553	0.595	0.667	1.000							
9/01	<i>ter.3</i>	0.358	0.397	0.409	0.475	0.509	0.549	0.615	<b>0.922</b>	1.000						
10/01	<i>fed.3</i>	0.356	0.394	0.407	0.472	0.506	0.545	0.611	<b>0.916</b>	<b>0.993</b>	1.000					
11/08	<i>oth.3</i>	0.192	0.212	0.219	0.254	0.272	0.293	0.329	0.493	0.535	0.538	1.000				
12/08	<i>fbi.1</i>	0.190	0.210	0.217	0.252	0.270	0.291	0.326	0.488	0.530	0.533	0.991	1.000			
10/09	<i>fed.4</i>	0.173	0.191	0.197	0.229	0.245	0.264	0.296	0.444	0.482	0.485	<b>0.901</b>	<b>0.909</b>	1.000		
11/09	<i>ter.4</i>	0.171	0.189	0.195	0.226	0.243	0.262	0.293	0.440	0.477	0.480	<b>0.892</b>	<b>0.900</b>	<b>0.990</b>	1.000	
4/13	<i>ter.5</i>	0.092	0.102	0.105	0.122	0.130	0.141	0.158	0.236	0.256	0.258	0.479	0.484	0.532	0.537	1.000

**Table 5.** Significant SVAR models with single interventions.

Homicide Type	Intervention	Estimate	Std. Error	t value	Sig
Ideological	Keenan v. Aryan Nations	−0.185	0.074	−2.506	*
	9/11 Terrorist Attacks	−0.183	0.072	−2.543	*
	Patriot Act	−0.187	0.072	−2.602	**
	Hate Crimes Prevention Act	−0.158	0.081	−1.830	+
	Fort Hood Shooting	−0.168	0.082	−2.042	*
Non-Ideological	Keenan v. Aryan Nations	0.217	0.079	2.732	**
	9/11 Terrorist Attacks	0.230	0.079	2.899	**
	Patriot Act	0.211	0.079	2.663	**
	Hate Crimes Prevention Act	−0.180	0.087	−2.078	*
	Fort Hood Shooting	−0.170	0.087	−1.947	+
	Boston Bombing	−0.392	0.104	−3.788	***

(i) \*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05; +p &lt; .1.

(ii) SVAR: lag-length = 2.

(iii) Newey-West corrected standard errors.

**Table 6.** SVAR model with multiple interventions.

Homicide Type	Intervention	Estimate	Std. Error	t value	Sig
Ideological	9/11 Terrorist Attacks; Patriot Act	−0.184	0.095	−1.948	+
Non-Ideological	9/11 Terrorist Attacks; Patriot Act	0.442	0.105	4.205	***
	Hate Crimes Act/Fort Hood Shooting	−0.327	0.109	−2.992	**
	Boston Bombing	−0.378	0.128	−2.957	**

(i) \*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05; +p &lt; .1.

(ii) SVAR: lag-length = 2.

(iii) Newey-West corrected standard errors.

Boston bombing. Due to their close temporal proximity, the 9/11 attacks and the Patriot Act were combined into one intervention (and Keenan v. Aryan Nations was excluded) as were the passing of the Hate Crimes Act and the Fort Hood shooting. Finally, as no interventions in the 1990s had a significant impact on any of homicide variables, only the Oklahoma City bombing was chosen to be included. This point in time was selected because it is the most devastating act and highest profile of fatal far-right extremist violence.

The results of this parsimonious model with a reduced number of interventions are presented in Table 6. When multiple interventions are included in one model we find that only the 9/11 and Patriot Act intervention has a significant impact on the monthly far-right ideological homicide count, decreasing it by 0.184, a 29% decrease from the mean, but only at the 10% level. The significant relationships between the far-right non-ideological homicide counts and the interventions that were found in the prior models are also significant in the new model in the same direction. Specifically, far-right non-ideological homicides increased by 0.442, or 55% increase from the mean) after 9/11 and the passing of the Patriot Act, decreased by 0.327 (41% decrease from the mean) after the Hate Crimes Act and the Fort Hood Shooting, and also decreased after the Boston bombings by 0.378, a 47% decrease from the mean.

## Discussion

The trivariate structural vector autoregression analysis, which controlled for multiple interventions over the 25-year period, found support for some of the deterrence, SCP/

ILP and backlash specific hypotheses. When controlling for variation in the national homicide rate, the final model identified an 0.184 decrease (29% decrease from the mean) in far-right ideologically motivated homicide events after 9/11 and the passing of the Patriot Act, a 0.442 unit increase (55% decrease) in the number of non-ideological homicides after 9/11 and the Patriot Act, and a significant decrease in the number of non-ideological homicides after the passing of the Hate Crimes Act/Fort Hood Shooting and the Boston Bombing (0.327 and 0.378, respectively). This is equivalent to a decrease from the mean of 41% and 47%, respectively. Since the theories used to frame the analysis did not predict relationships in the same direction or offer the same explanations for these relationships even if in the same direction, it is important to discuss the implications of these results.

To begin, all interventions and events, except 9/11 and the Patriot Act, had no impact on levels of fatal far-right ideologically motivated homicides. These null results were specific to our deterrence and political encouragement hypotheses. In addition, backlash theory predicted an increase in far-right ideological homicides after 9/11 and the Patriot Act, however there was a decrease in homicides after these events.

SCP/ILP was the only theoretical framework that accurately predicted a decrease in far-right ideological homicides after the passing of the Patriot Act. The Patriot Act provided law enforcement with additional powers to share information, conduct surveillance, access personal records, and conduct secretive searches. These enhanced police powers are exactly what situational and ILP frameworks argue could be used proactively to remove opportunities and to more effectively investigate potential violent extremists. Consistent with this interpretation is that both the 1996 Anti-Terrorism law and the 2009 Hate Crimes Act did not lead to a decrease in far-right ideologically motivated monthly homicides. Both statutes either enhanced penalties or reduced the appeals process. SCP adherents maintain that these types of laws, ones that only enhance penalties, are too far removed from potential ideologically motivated crime scenes to have any effect on offenders (Cornish & Clarke, 1986, 2008; Freilich, 2015; Newman, 1997; Tilley, 2004). It is important to note, however, that the resources allocated through the Patriot Act were primarily meant to impact jihadi threats to the United States. Therefore, it is interesting that the benefits the Patriot Act provided to law enforcement jurisdictions appear to have diffused to combating all types of ideological violence.

It is important to note though that the revised FBI guidelines were *not* associated with a decrease in monthly far-right ideologically motivated homicides. Similar to the Patriot Act, the revised FBI guidelines provided law enforcement with more authority, which some would suspect could have been used situationally by the police to increase the costs and risks of an attack. It could be that these revised guidelines had no effect because they have the same scope as the Patriot Act, which was one of the most comprehensive statutes ever enacted to fight terrorism in the United States. Importantly, the Patriot Act's passage also coincided with additional federal resources and personnel that would also be useful in decreasing the number of attacks. Although not framed in this analysis through deterrence theory, a deterrence theorist could argue that the guidelines did not receive the same level of media coverage or public scrutiny as the Patriot Act. Thus, the lack of knowledge by the public as to the increased certainty of punishment could explain the null result.

The null effects of the SPLC civil suits are also interesting. The SPLC suits received significant media attention and were credited with severely impacting the finances of two

notorious far-right organizations. In terms of the far-right's overall level of fatal ideologically motivated attacks, however, it appears that neither of these lawsuits had any national impact. Part of this can be explained by the fact that these two organizations were responsible for a miniscule number of all far-right homicides- thus both the situational and specific deterrent effects were too small to capture in a country-level analysis.<sup>11</sup> Regarding general deterrence, it could be that most other far-right groups and supporters (e.g., skinhead or neo-Nazi gangs) had few resources to lose so the threat of a lawsuit was not a concern. In fact, there could be a selectivity bias in that the SPLC specifically targeted the groups with the most resources to lose and therefore any diffusion of benefits to other organizations would only have diminishing results.

The lack of any significant intervention or event in the 1990s for the multi-intervention model for both ideological and non-ideological homicides occurred during a period when the far-right was very active (e.g., the rise of the militia movement and the end of the millennium). This signals that certain types of criminal acts may be resilient to violence reduction techniques when other motivators exist, especially those that manifest from an extremist ideology. The results also have important policy implications since they suggest that certain strategies, such as the revised FBI guidelines and the Antiterrorism and Effective Death Penalty Act, were ineffective in undermining terrorist and extremist fatal violence at the national level. These and the other null effects were surprising since we relied upon well-developed theoretical frameworks that predicted such interventions would impact violent criminal behaviours (Pridemore & Freilich, 2007).

Turning to the non-ideologically motivated far-right homicides, the 44.2% increase after 9/11 and the Patriot Act was predicted under backlash theory if one believes the change is connected to 9/11. But, it could be evidence of displacement if it is connected to the passing of the Patriot Act. This result deserves further discussion. There is evidence that hate crimes against Arabs and Muslims increased after 9/11, which could explain part of the increase in the non-ideological offences (Byers & Jones, 2007; Disha, Cavendish, & King, 2011). However, not all hate crimes are committed by far-rightists and not all crimes committed by far-rightists are hate crimes. In addition, most far-right hate crimes are ideologically motivated and would be captured in the Extremist Crime Database as ideologically motivated homicide events – the same category of homicides that significantly decreased after the implementation of the Patriot Act. Admittedly, due to the nature of open-source data, there are most likely hate crimes that were committed by far-right extremists and ideologically motivated, but are coded in the ECDB as non-ideological events as there was not enough information in open-source data to definitively make that link without making assumptions of the open-source data.

If one attributes the increase in non-ideological homicides to displacement, the reasoning would follow that far-right violent offenders who would have committed ideological homicides instead engaged in non-ideologically motivated crimes. Underlying this explanation is the assumption that a violent far-rightist who is motivated to engage in violence is as content committing non-ideological violence if opportunities for ideological violence are reduced. The terrorism intervention literature finds that there is evidence of displacement with ideological crime, however, the existing research focused on one type of terrorism being displaced to other types of terrorism, not terrorism displaced to non-ideological crimes (Lum et al., 2006). It is also possible though that this increase was a measurement artefact. The Patriot Act and 9/11 highlighted the danger posed not

just by jihadis, but by extremists generally. While a hate murder committed by white supremacist would likely always be accurately identified as extremist related (due to its inherent newsworthiness), it could be that a domestic violence killing by a neo-Nazi might not be (since the extremist ideology is not related to the murder). But, after the 9/11 and the Patriot Act the heightened concern over extremism may have spurred the media and or watch-groups to investigate (and then confirm) rumours of possible extremist connections by the offender for these non-ideological homicides. In other words, there was no true increase in non-ideologically motivated homicides by far-rightists, but the media, watch-groups and others simply did a better job in identifying these non-ideologically motivated extremist related crimes.

Finally, from a practical, policy perspective, it could also be that the Patriot Act focused more resources on responding to ideologically motivated homicides after 9/11, pulling resources and personnel away from non-ideological criminal investigations and non-terrorism concerns. Thus, a decreased focus and resources on combatting regular crime could also account for the increase in regular homicides (Weisburd, Jonathan, & Perry, 2009). No matter the theoretical perspective, after 9/11 and the passing of the Patriot Act, far-right ideological violence significantly decreased, yet non-ideological violence from the same pool of offenders significantly increased at more than twice the rate.

There were also significant decreases in non-ideological homicides after the passing of the Hate Crimes Act/Fort Hood shooting and the Boston bombing. Although backlash theory hypothesized a change in non-ideological homicides because of the Fort Hood shooting and the Boston bombing, it was in the opposite direction. The Hate Crimes Prevention Act is the only intervention out of these two periods that impacted the non-ideological homicide in the hypothesized direction. However, as with the Patriot Act, it is temporally connected to a jihadi terrorist attack. It is important to point out that these unexpected decreases after two Al Qaeda inspired events for the non-ideological events could falsely attribute these high-profile terrorist attacks as being significant deterrents to far-right routine homicides.

Post-hoc theorizing for explanations of these patterns resulted in the possibility that a variable not included in the model might be impacting the results. One suggested possibility could be unemployment rates. Although the criminological literature has produced mixed results on the impact of unemployment rates on violent crime, there is some evidence supporting a direct link from increases in unemployment rates over time to increases in homicide rates. One study found a significant positive relationship between the changes in white unemployment rates and homicide arrest rates (Smith, Devine, & Sheley, 1992). The authors state that “whites may be influenced to a greater extent by changes in unemployment because its *relative* impact is felt more intensely among this group. In effect, whites may have a lower threshold at which hardship spurs criminal activity” (Smith et al., 1992, p. 555). If this relationship is true, then decreases in white unemployment rates should spur similar decreases in white homicide rates, of which the far-right non-ideological homicides are a subset.

Although anecdotal in nature, empirical evidence that lends support to this postulation originates from United States Bureau of Labour Statistics data (United States Bureau of Labor Statistics, 2017) that shows that the seasonally adjusted unemployment rates for white males peaked October of 2009 after a sharp increase starting near the beginning of 2008. Incidentally, this coincided with the passing of the Hate Crimes Prevention Act and



the Fort Hood shooting. After this date, the rate decreased substantially and consistently through the end of our dataset in December 2014. Again, we acknowledge that this theory is based on a limited time frame and is anecdotal in nature. However, we believe this relationship deserves a closer examination in future research to determine if it in fact accounts for our findings.

Although we are confident in the robustness of our results, there are some limitations to discuss. First, some of the null effects for interventions that theoretically should have impacted far-right homicide events could be explained as an artefact of the analysis using national-level data. Some interventions, such as the SPLC lawsuits, although successful in specifically deterring the organizations targeted, had no significant impact at the national level. Importantly, the American far-right's ideology stresses the importance of county and local concerns. Structurally, the U.S. far-right differs from centralized ideological movements. Instead, it is decentralized and relies upon local leaders and groups (Chermak, 2002; Freilich, Pichardo-Almanzar, & Rivera, 1999). It is possible that national-level interventions would not be as impactful as local interventions.

Second, we focus here solely on the relationship between these interventions and homicides—which are rare events. In addition, it is important to remember that all events included in our study are completed/successful attacks. Further research could build on the theoretical discussion presented here by examining the impact of these interventions on unsuccessful attacks (e.g., foiled plot) and non-violent extremist acts such as material support for terrorism, financial schemes or cyber-attacks. Third, there is likely some measurement error resulting from the limitations of open-source data. As discussed, when an ideological motivation fails to be mentioned in an open-source, even if the offender's ideology and the characteristics of the victim or target point towards the homicide being ideologically motivated (e.g., a white supremacist kills a minority in a bar fight) the ECDB would, by default, take a conservative approach and code the event as non-ideological. This measurement error could potentially reduce the differences we might observe in the analysis between the two types of far-right homicide as a small fraction of ideological events would be coded as non-ideological. Fourth, there are limitations to a time-series analysis using monthly aggregated counts when several of the interventions of interest were temporally proximate. Although we attempted to theoretically disentangle these events, empirically, it is impossible to determine which ones might have the largest impact on the model. This analytical limitation requires caution in result interpretation, especially with competing interventions.

## Conclusion

Our analysis examined the impact of 15 distinct interventions and high-profile events on the monthly frequency of far-right homicide events (both ideologically and non-ideologically motivated) over a 25-year period, while controlling for the general level of fatal violence in the United States. The ultimate model of interest was a trivariate structural vector autoregression with model interventions which found that only the 9/11 terrorist attacks and the Patriot Act significantly impacted future levels of ideologically motivated far-right homicides. We contextualize these results within an SCP and ILP framework, as law enforcement was provided with an unprecedented number of investigative tools through the passing of the Patriot Act that could be used to reduce acts of

ideological violence. Three intervention periods had a significant impact on non-ideological homicides, although not always in the direction predicted. After 9/11 and the Patriot Act, non-ideological homicides significantly increased, a pattern for which we offer three possible explanations: (1) a shift in law enforcement resources to terrorism and ideological violence cases that unintentionally increased far-right non-ideological violence, (2) the displacement of ideological homicides to non-ideological homicides due to a heightened law enforcement focus on terrorism, and (3) an artefact of open-source data limitations.

Finally, the observed reduction in non-ideological homicides after the passing of the Hate Crime Prevention Act was predicted through deterrence theory, as a small portion of far-right non-ideological homicides are hate crimes. However, a competing, post-hoc hypothesis is posited that places less emphasis on the impact of the Hate Crime Prevention Act, the Fort Hood Shooting, and the Boston bombing, and instead highlights the impact of the reduction of white male unemployment rate on far-right non-ideological homicides.

From a policy perspective, it appears that, with the exception of the Patriot Act, federal legislation, civil lawsuits, and changes to federal investigative guidelines, have no significant impact on ideological violence committed by far-rightists and a limited impact on non-ideological violence. In some ways, this is not surprising, as much of the far-right violence measured in this data is investigated and prosecuted at the state and county level. Future legislation and intervention attempts should consider focusing resources on providing law enforcement with the tools and resources to investigate and apprehend ideological offenders, as opposed to focusing on deterrence based statutes and legislation that appear to have limited impact on far-right fatal violence.

## Notes

1. Far-right extremists are operationalized as individuals or groups that subscribe to aspects of the following ideals: "...[far-rightists are] fiercely nationalistic (as opposed to universal and international in orientation), anti-global, suspicious of centralized federal authority, reverent of individual liberty (especially their right to own guns, be free of taxes), believe in conspiracy theories that involve a grave threat to national sovereignty and/or personal liberty and a belief that one's personal and/or national 'way of life' is under attack and is either already lost or that the threat is imminent (sometimes such beliefs are amorphous and vague, but for some the threat is from a specific ethnic, racial, or religious group), and a belief in the need to be prepared for an attack either by participating in or supporting the need for paramilitary preparations and training or survivalism. Importantly, the mainstream conservative movement and the mainstream Christian right are not included." It is important to also note that many far-right terrorists, and other violent extremists like Al Qaeda or ISIS supporters, are not experts in their movement's ideological beliefs, and may only have a rudimentary knowledge of it. But all violent extremists support their extremist ideology and committed their violent attack to further it.
2. For example, a far-rightist who gets in a drunken bar room brawl with a minority and yells a racial slur before killing them. Without additional evidence that the far-rightist acted to further their ideological goals, this homicide would could be prosecuted as a "non-ideological" hate crime and not as an ideologically motivated event or an act of terrorism.
3. For an in-depth discussion about the data collection process for the ECDB and the reliability and validity of the data, see Freilich et al. (2014) and Chermak, Freilich, Parkin, and Lynch (2012). Recent studies have used the ECDB to examine violent extremist and terrorist groups

(Belli, Freilich, Chermak, & Boyd, 2015; Chermak, Freilich, & Suttmoeller, 2013), county-level variation in attacks (Chermak & Gruenewald, 2015; Freilich et al., 2015), and honour killings (Hayes, Freilich, & Chermak, 2016), for example.

4. For a longer discussion on these indicators and determining how coders determined whether an incident was ideologically motivated or not, see Gruenewald (2011) and Parkin, Freilich, and Chermak (2015).
5. For a robustness check we also estimated parameter  $\theta$  by maximizing Shapiro-Wilk test p-value, since the main objective of IHS transformation is to obtain data that is as close to normally distributed as possible. We obtained the values of  $\theta$  of 0.89 and 0.978 for *ideal* and *nonid*, respectively. Thus our assumption of  $\theta=1$  is a reasonable one.
6. High correlation between the categorical variables can create a problem of multicollinearity. Wißmann and Toutenburg (2007) show that the problem of multicollinearity can be avoided with selection of reference category and suggest a reference category that contains at least 4% of observations. Since in all models estimated the reference category contains at least 10% of observations, multicollinearity is not an issue.
7. See appendix for the illustration of differences between the reduced form and structural VAR models and the importance of identifying assumptions in order to recover structural parameters from the reduced form estimates.
8. One of the main criticisms of VAR models is that the ordering of the variables matters given the recursive identification scheme employed in this paper. Since both reduced form and structural models yield similar results in signs and magnitudes, we can confidently say that the ordering of variables does not matter. Moreover, the correlation matrix of reduced form residuals shows the off-diagonal elements are less than 0.3 in absolute value in all cases, this is further evidence that the results will hold even if we switched the order of variables in the model. These robustness checks are available upon request.
9. For the full derivation and explanation of the SVAR equations, please see the Methodological Appendix.
10. We used the AIC criteria on three endogenous variables to determine the lag length. The reason we excluded dummy variables from the lag lengths selection process is because the inclusion of different dummies results in different lag length. In such cases, it is difficult to know if the differences in the significance of dummies is due to lag length or the intervention event itself.
11. Further investigation into the ECDB shows that only four homicide events were connected to the World Church of the Creator during the 25-year time frame (one pre-lawsuit and three post-lawsuit) and eight to the Aryan Nations (five pre-lawsuit and three post-lawsuit). These were a mix of ideologically motivated and non-ideologically motivated homicides.

## Disclosure statement

No potential conflict of interest was reported by the authors.

## Funding

This research was funded by grants from the U.S. Department of Homeland Security (DHS) Science and Technology Directorate's University Program Division; and the Resilient Systems Division both directly and through the National Consortium for the Study of Terrorism and Responses to Terrorism (START). The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of DHS or START.

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